Driven to Cheat: A Study on the Drivers of Dishonesty—through the Game of Golf

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Thank you to Dan Ariely for being my advisor, confidant, and guide. I look forward to working together in the future to further the results found in this study. Also, I must thank Shahar Ayal for putting in countless hours processing and analyzing data with me and to Megan Hogerty for putting up with me. I could not have done this without any of you.
ABSTRACT

People like to think of themselves as more honest than the person sitting next to them. In practice, this cannot always be the case. Through two experiments, we investigated behavior in golf—a sport of self-governance, where the player is frequently confronted with opportunities to bend the rules and the score. Our research shows that people believe the average person will cheat more often than they themselves do, responding more strongly to both a decision’s perceived degree of dishonesty and the likelihood of being caught. We also found that altering the level of a competition did not change people’s beliefs about their dishonest behavior, even though cheating was directly related to competitiveness. In general, controlling for certain characteristics produces consistent predictions of reported cheating levels, and adding certain external circumstances drastically changed participants’ perceptions of dishonesty. People like to think of themselves as being in complete control of their decisions, but we will show that their perceptions can be changed without actually altering the terms of the decision.
Benjamin Franklin’s old adage of honesty as the best policy no longer seems to apply in the modern era. Cheating has become the norm; honesty—the exception. In a society where some of the most prominent and influential figures in America have been caught lying or stealing, it is not surprising that the rest of America is following suit. Enron and WorldCom CEOs breathe a collective sigh of relief as their fraudulent behaviors become mere footnotes to Bernie Madoff’s $50 billion dollar Ponzi scheme. Homeowners and investors alike find themselves disillusioned by carelessly and dishonestly issued mortgages and their ‘foolproof’ derivative securities that have left many homeless, penniless or both. Three-time Most Valuable Player award winner Alex Rodriguez finds his reputation tarnished after testing positive test for steroids, while seven-time MVP Barry Bonds faces potential jail time for lying under oath about the same illegal behavior. Even the formerly most powerful person in the world, President Bill Clinton, was not immune to cheating—caught engaging in an extramarital affair with Monica Lewinsky.

Dishonest behavior is not limited to such large examples, and similarly cannot be blamed solely on these prominent figures. For instance, it is many average Joes who are responsible for an estimated $994 billion of annual losses due to occupational fraud, seven percent of GDP\(^1\). It is also the laymen who are responsible for an estimated $16 billion of losses to the US retail industry due to the purchase, use, and then return of worn

clothing\textsuperscript{2}. However, it is not two or three or even one hundred people regularly revolving their entire wardrobes who are responsible for these monumental figures. Instead, it is thousands of individuals who are returning one shirt or sweater that they wore over Christmas who account for the large sum. As demonstrated in a 2008 study, society is not full of a few people who cheat a lot, but instead a lot of people who cheat a little\textsuperscript{3}. Thus, the sum total of all these small amounts of theft or dishonest behavior leads to a drain on our economy on a much larger scale.

Does this imply that everyone cheats? Are people inherently dishonest? Several recent studies on this phenomenon would suggest not. Mazar, Amir and Ariely propose the theory of self-concept maintenance\textsuperscript{4}. Through their study, they have identified an internal regulator that works to balance the everyday competing motivations of gaining from cheating versus maintaining a positive self-image. Thus, people cheat up to the point that they actually feel like they are cheating—and feel bad about it. However, this mechanism works differently for different people, explaining why some people cheat more than others. Thus, it proceeds necessarily that there must be another force that will dictate the degree to which a person deviates from the ethical standard. From that idea, it might be suggested that certain personal characteristics make an individual more or less likely to be a moral deviant. Suppose wealthy or competitive individuals are more likely to cheat than poor and uncompetitive individuals. Identifying such categories that could

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approximate a person or group’s place along a moral spectrum would present a wide variety of opportunities to control and minimize dishonest behavior.

Recent studies have also noted external circumstances and forces which increase dishonest behavior. One study demonstrated that tired individuals (or people with ‘depleted self-control’) were more likely to behave dishonestly\(^5\). Another showed that people were more likely to cheat if someone around them also was cheating\(^6\). A third showed that reiterating the rules and moral standards of an act prior to completing that task decreased levels of dishonest behavior\(^7\). It seems evident that people’s behavior is affected by things as trivial as how they feel that day, the weather outside, or their perceptions about another person’s behavior. How much does stubbing your toe on the way to work really affect the way you treat a client once you get there? People typically believe they have set moral codes, but how easily and by what temptations can it be manipulated? How can the perceived outcome of an event affect future behavior in that same activity?

Author David Callahan suggests that a culture of cheating in America has led to such rampant dishonest behavior. For example, he cites law firms as breeding a corporate culture of dishonesty—promoting overbilling as the norm. He believes many lawyers still enter the profession with virtuous aspirations but are quickly caught up in the chase to be the most profitable employee and lose their grip on morality. Callahan appears to blame the institution before the individual. In a study done on academic dishonesty in graduate


business programs, one 2006 study found that perceived peer behavior was the indicator of student behavior\(^8\). Thus, if a culture of cheating existed throughout a particular class or program, people would be more likely adopt that behavior. As Ken Caminiti once said to *Sports Illustrated* about his own steroid use “At first I felt like a cheater. But I looked around, and everyone was doing it”\(^9\). If this is the case, the question becomes what occupational cultures are promoting dishonest behavior or, looked at differently, what types of careers are dishonest people drawn to?

Thus, there are many things we already know about cheating. We know it exists and that it is a problem. We know that it is rampant in our society and that it extends to all divisions of life. We know that there exists some force that drives people to cheat, a force for which scientists have tried to posit explanations. We know that certain external situations are more prone to dishonest behavior than others. However, are people inherently dishonest? Although the debate on the individual’s inherent moral proclivities will probably never be definitively answered, it is clear that certain people are more likely to behave dishonestly—whether or not aided by external pressures—than others.

There are many elements about the character of cheating that are already known. What we do not know for certain is what types of people cheat. We are starting to understand the problem but need to further clarify its components and perpetrators before we try to solve or combat dishonesty. Who are these people that are more likely to cheat than others? In this paper we hope to answer that question.

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CHEATING IN GOLF

Golf is the hardest game in the world to play, and the easiest to cheat at.

-Dave Hill, US golfer

He who has the fastest golf cart never has a bad lie.

-Mickey Mantle, baseball legend

Golf is a game in which you yell “Fore!” shoot six, and write down five.

-Paul Harvey, US radio broadcaster

‘Do I really need to count that three-foot putt? I make that nine out of ten times. Mark me down for a five.’ This quote may sound like something your playing partner has said at one time or another on the golf course. There exist many ways to cheat during the average round of golf—count too few strokes, move a ball to a better lie, count a whiff as a practice swing, just to name a few.

The unique characteristics of the sport of golf make it unlike any other when it comes to the study of honesty and morality. Among team sports, there is always someone next to you—whether an official, teammate or competitor—evaluating your next move. If you travel in basketball or throw two forward passes on one play in football, someone will likely see it. The individual is held accountable by the group. The structures and motivations of the game, defined by a set of rules, are upheld by those people playing the game.

In individual sports, the major difference lies in the pursuit of individual excellence in lieu of the team concept. Moral behavior, following the guidelines
established by a particular set of rules, is now solely measured by the interests of the individual. Thus, the ethical choices made by that athlete can be more easily measured and attributed directly to the individual’s moral code. In other words, it is easier to question the ethics of a tennis player than an individual NFL athlete because there are fewer external forces guiding his decisions. There is little of the “shared self-deception” that Gordon Reddiford believes exists in team sports. This theory claims that the individual athlete’s moral compass can be skewed by the values shared by a team or group of athletes. Conveniently, in golf, it is more difficult for behavior to be affected by the influence of competitors.

Golf is a uniquely individual sport. It is one of the rare activities in which you are competing against yourself in addition to other people. Other sports/skills such as bowling, darts, or billiards are similar in that your score is ultimately attributable only to your performance, not that of your opponent. However, in golf, you may actually be alone during your entire round, with no one nearby to hold you accountable to the rules. Golf can be solitary yet competitive.

A further distinction between golf and other individual sports is the number of opportunities in which a golfer has to cheat. For instance, in tennis, the individual can be monitored closely by line judges and held accountable by a competitor several yards away. In bowling, the number of pins knocked down is absolute and cannot be changed by some enhancement of circumstances. Even in an activity like darts, the proximity to one’s competitor minimizes chances to cheat. In golf, on the other hand, the distance between competitors at one point in time could exceed hundreds of yards, with sightlines obscured by trees and hills. Even though there are officials in all groups at the PGA level,

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those officials will remain a certain distance away from the player so as not to disrupt his concentration nor his line of sight. As a result, the decision to follow the rules is made by the individual golfer.

Another element to consider when discussing cheating in golf is the rulebook. There are thirty-four principal rule categories in the official United States Golf Association handbook, with multiple subcategories to each rule\(^\text{11}\). Because the rules are so well-defined, there exist very few shades of gray. It is not as in football where offensive linemen hold on every play, even though they are not supposed to, because officials do not enforce the rule consistently. All of the rules of golf are equal in terms of their enforceability, although this does not imply that they are always followed. The most important point here is that when people act on the golf course, it is always either legal or illegal.

So, if cheating behavior in golf is more indicative of pure individual choices than other sports because of its boundless opportunities and limited oversight, how does cheating in sports correlate to cheating in life? If we can say that a particular type of person cheats in golf, can one also say that that type of person is more likely to cheat in business and in other life decisions?

Despite how many chances one has to cheat, there always exists some point at which the individual switches from thinking about dishonest behavior to acting on that impulse. This final decision is determined by a force described later. Unquestionably, people often choose different paths with regard to ethics: some people cheat; others don’t. Some choose to ignore temptation; others do everything in their power to win a $100 bet.

What individual characteristics, therefore, make a person more likely to cheat? Is it wealth, gender, race, age? Or does it just come down to how competitive a person is? We can measure and categorize this spectrum of (dis)honesty by comparing a person’s behavior in a variety of tempting situations with their personal characteristics. Upon further analysis, it would also be possible to identify groups and organizations that would be more likely to exhibit immorality.

**BUSINESS AND GOLF**

_Eighteen holes of golf will teach you more about your foe than eighteen years of dealing with him across a desk._

-Grantland Rice, _US sports columnist, author_

_“The reason golf is so popular is that it gives people cooped up in the office all week a chance to lie and cheat outdoors.”_

– Henry Beard, American humorist

Business and golf will always be inextricably linked. Corporate sponsorships drive the PGA tour. Professional golfers adorn their clothing with various corporate logos while businesspeople from those same companies sit under corporate tents around the 18th green, discussing future business proposals. Tiger Woods made nearly $126 million in 2008, only $23 million of which was for actually playing golf.12 With business so intertwined with the pros, it is not surprising that golf is also a great vehicle for business

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among amateurs. CEOs striking multi-million dollar deals while playing a round of golf together is not uncommon. Similarly, middle managers and salesmen often use a round of golf to schmooze a client or to close a deal.

One of the allures of golf as a vehicle for business is that everyone can play it— young or old. One person’s performance does not directly affect the partner’s opportunity to play well. Furthermore, golf offers the unique opportunity to have another individual’s attention for multiple hours in a relaxed quiet environment, something often not attainable in the office. In fact, some CEOs loved the game so much that they were caught skipping out of work to play golf. Shareholders lampooned Stan O’Neal, former CEO of Merrill Lynch, after discovering that in August 2008, in the midst of the market meltdown, O’Neal turned in 19 scorecards. And, in a study of executives, 55% admitted to calling in sick or leaving early to play golf.

Also alarming is the nature in which businesspeople are striking deals. On the golf course, business golf and morality often clash:

A management consultant is out golfing with two CEOs who are negotiating a deal worth millions. He is shocked when the CEOs decide to bet an aspect of the deal worth $150,000 on the outcome of the golf game (company money, mind you). He is even more shocked when he sees one

of the CEOs kick his opponent’s ball into the woods to help him gain a winning advantage.\textsuperscript{15}

This urge and need to win have changed golf decisions into business decisions. Now, dropping two shots off of your score not only might beat your partner’s score or win a bet, but also it might win you more business. There are many other reasons businesspeople might cheat at golf: to impress someone, to impress themselves, or for the thrill of victory. Whatever the reason, it is important to acknowledge that there are businesspeople who cheat at golf. In fact, in a 2002 study, 82\% of executives surveyed admitted to doing so at one time or another\textsuperscript{16}.

So, businesspeople often cheat at golf. Some force drives them to make the decision to cheat. How does the mechanism that controls moral judgments in sport compare to the mechanism that guides decisions in life? Does it behave similarly and respond to the same stimuli? A comparison of Reddiford’s theory of self-deception in sport and Ariely, Amir, and Mazar’s theory of self-concept maintenance points to an answer of yes.

Reddiford describes the self-deception of cheating in sports as the paradox of both viewing oneself as honest and intentionally behaving dishonestly. Athletes attempt to triumph within the standards and rules of a particular sport. However, once an athlete departs from such rules in order to gain a competitive advantage, he must maintain his innocence or the cheat will be denied his own sense of triumph—trying to maintain a good self-image\textsuperscript{17}.

\textsuperscript{16} 2002
The theory of self-concept maintenance identifies two phenomena that exist in human decision-making—categorization malleability and attention to standards. In this instance, we are only concerned with categorization malleability. Similarly to self-deception in sport, the individual rationalizes acts in his own self interest in order to maintain a particular self-concept. The individual bends his or her own perception of an action in order to avoid any negative blows to the self-image\textsuperscript{18}. Just as athletes try to gain a competitive advantage by cheating without acknowledging it as such, so too do lawyers bill another hour without a second thought. It appears that the mechanism acting on athletes described by Reddiford is a specification of the theory of self-concept maintenance, which generalizes human behavior for all scenarios. In other words, cheating in golf is a manifestation of the same forces guiding behavior in other aspects of life—such as business decisions.

In 2002, a survey of 401 executives attempted to establish a direct relationship between golf and business\textsuperscript{19}. Researchers found not only an apparent relationship between golf and business, but also a blatant example of self-deception (self-concept maintenance). 72\% of these executives believe that behavior in golf parallels behavior in business. One cannot say that because businesspeople believe in this phenomenon it must be true. However, who better exists to evaluate the relationship than those who makeup both parties. Also, as a quarter of the 25 million golfers in America are executives\textsuperscript{20}, this sample is a reasonable cross-section of the business/golf population.

Based on this correlation, one would expect the percentage of businesspeople who say they are honest in business to match what they say about honesty in golf. Interestingly, although 82% of executives admitted to being less than honest in golf, only 1% admitted to being dishonest in business. This enormous discrepancy could demonstrate a serious level of self-deception, even if cheating in golf is not perfectly correlated to cheating in business. There appears to be a larger pressure to rationalize cheating in business, possibly due to business’ economic and monetary implications. As Marianne Jennings phrases it in A Business Tale, “all in all, the only sense to be made from the data is that executives lie in golf and lie in business but also lie about lying in business”\(^2\). Also, because people are less likely to indict themselves than others (self-reporting bias), it would be interesting to investigate how much people deceive themselves in terms of their golf behavior. By taking the average of a population’s self-reported cheating and compare it to their interpretation of the average person’s behavior, such a value could be determined.

Questions about golf are also a great substitute for questions about business because of the differences in their structures. One has a defined rulebook, discussed earlier, while the other presents thousands of ambiguous ethical situations. By replacing questions about business with questions about golf, there is no longer any possibility of misrepresenting a situation’s legality: in golf, you either are breaking the rules or you aren’t breaking them. Thus, when asking questions about dishonest golf situations, all participants will be able to understand that the situation is dishonest, instead of ethically ambiguous. This difference is helpful in determining people’s opinions on definitively

dishonest or illegal behavior, because these same businesspeople can no longer rationalize a situation as being ‘kind of moral.’

Whether or not golf decisions are an accurate representation of future business decisions, it proves important to also determine the types of situations in which people are tempted to cheat. Both from an internal and external perspective, forces acting on individuals often dictate decision making. Various studies mentioned previously have successfully identified individual external factors that alter choice. This study will aim to not only replicate those findings, but also to illustrate specific situational temptations that most successfully disguise honesty in the mind of the golfer.

For instance, if you know that your golfing partner is cheating, how does that affect your behavior? Are you more likely to cheat because he or she is cheating? A 2009 study found that other individuals’ behavior can directly alter frequency of cheating.\(^22\) Once someone establishes the social norm of cheating, possibly by cheating himself, this culture of cheating increases the likelihood that everyone else cheats. Does this phenomenon carry over to golf? Also, how does your behavior differ when you are playing with a client than when you play with your boss or with your friends? Are you more likely to cheat with your friends because you are more comfortable with them? Are you more likely to cheat with your boss or client because you want to impress them? Or maybe the intimidation factor of the boss’ presence will keep dishonest behavior in check.

Does the structure of the played game change cheating habits? In golf, one could be playing a friendly round of golf or with a large wager on the line or in hopes of

winning a tournament trophy. Incentives to succeed (win) in the more competitive games, and further incentives to cheat, would be greater than in the friendly match. However, it would seem also to be more difficult to rationalize cheating in those more meaningful situations. Thus, how is this tradeoff between winning at all costs and maintaining your self-concept accounted for by the individual?

Finally, in which types of golfing scenarios are people more likely to cheat? Is it the degree of cheating which dictates the decision or perhaps the perceived fairness or unfairness of a golf scenario? Is one more likely to cheat because they hit a great shot and do not feel justly rewarded by the result of that shot? What do all of these decisions and forces say about possible correlations to business decisions?

The question now is how to accomplish these goals, to understand more about the composition of dishonesty. It would be difficult to create a survey asking businesspeople meaningful questions about dishonesty in the workplace because different industries offer vastly different chances to behave dishonestly. The opportunities for an investment banker to cut corners vary greatly from the opportunities a scientist has to be dishonest. Thus, it becomes necessary to find a medium that can unify the terms and model real world behavior. Golf is that medium.

Businesspeople from all industries are faced with the same challenges and temptations in a wide variety of common scenarios. It is no longer necessary to compare breaches of conduct by such ambiguous standards. Mail fraud is no longer better or worse than cheating on your taxes. Instead, the question changes to how likely are you to cheat at golf in a given situation. The person who is more likely to behave in a certain manner on the golf course is likely to do so similarly in the business world, whether it be in sales
or law. As demonstrated in the previous pages, golf is not only a great model for human behavior, but it is also relevant to business. Although golf is not business, it proves, in our estimation, to be one of the best barometers for business behavior. It is unlike any other sport in both its relation to business and ethics, and is the only medium capable of evaluating all industries on a level playing field.

**METHODOLOGY**

For the following study, we solicited an online survey of 361 golfers, and presented them with twenty-three different golf scenarios (listed in Appendix 1) in which they were given the opportunity to cheat. These particular scenarios were chosen for two reasons. First, the acts of cheating described in each scenario represent some of the most common examples of cheating found among casual golfers—mostly established by personal experience and input from fellow golfers. Also, the structure of the questions formed aimed to reveal not only the relevant data from an individual scenario, but also how particular types of cheating compared to others. For example, do people think there is a moral difference between a person kicking a ball for a better lie and picking it up and placing it in a better lie, and if not, what could account for a difference in observed cheating levels? Does the added element of uncertainty in cheating (i.e. kicking instead of placing the ball) make it seem less immoral?

We collected a personal profile and golf profile from the participants. These profiles will help model and identify potential characteristics that make a person more likely to cheat. For example, are rich people more likely to cheat than the poor? This
element of the study should reveal the question of who is cheating in our society. My objective is not to show how much, but instead how often or how likely someone is to cheat. It is less important the mechanism of why, in the abstract sense, that cheating occurs, but instead what tangible actors push a person to cheat. Determining the characteristics of those more likely to be dishonest could have large implications for better and more efficient regulation in the future.

We performed two experiments. The first involved a four condition comparison (a 2X2 matrix). There were two response conditions. We asked one group how often they would make the dishonest decision described in each of the scenarios and another group how often they thought the average person would make the same dishonest decision. These two variables allowed us to measure the level of self-deception common among golfers and businesspeople. When we take the mean of the self condition and the average condition, are they the same? If not, how big is the difference and what are the characteristics of that discrepancy?

Using these two conditions, we wanted to see how the element of competition would affect behavior. We gave half of the respondents the condition of playing in a golf tournament (the club championship) and the other half playing in a friendly foursome. There is more riding on victory in the competitive scenario and more temptation to gain a competitive advantage through cheating. However, there is also a larger stigma associated with cheating in this competitive atmosphere. How does the golfer rationalize the two competing motivations of winning and remaining honest once they are in a competitive environment?
Henceforth, we will refer to the four conditions as the *self* condition, the *average* condition, the *friendly* condition, and the *competitive* condition.

In the second study, we utilized the same response conditions of *self* and *average* used in Experiment 1, but compared them to a third condition, *morality* (1X2 Matrix). Using the same twenty-three scenarios, we asked 139 participants how moral or immoral they thought each scenario was on a scale of (1-10). (1) represented a completely immoral situation and a (10) represented a completely moral situation. Now that we had the golfer’s viewpoint on each scenario in terms of the *self, average, and moral* conditions, we could compare the conditions using aggregate mean cheating levels for each scenario and condition.

Our primary objectives in this experiment were as follows: we hoped to find a direct correlation between *morality* and cheating behavior in both conditions. Such a finding would demonstrate that people responded logically to each scenario, treating situations as degrees of cheating. Because of the fact that all of the scenarios are examples of cheating (illegal behavior), respondents could have decided that each and every scenario was a (1) on the morality scale. This response would follow if people only see dishonesty in black and white—either an honest or dishonest situation. Then, we would have to come up with an alternative explanation as to why the levels of perceived cheating differed between scenarios. The second objective aimed at separating the *self* and *average* conditions to determine if differences in perceived levels of morality affected the two perspectives differently. We hope to find that as perceived morality increases, people expect the average person’s level of cheating to increase more than their own cheating. This result could reveal two phenomena. The first possibility is that people
believe that they themselves view cheating in black and white, while the average person views cheating in degrees of dishonesty. The second possibility is that self-delusion becomes more pronounced as the level of perceived dishonest decreases, and people are more likely to reveal their actual behavior through the *average* condition.

We then used both experiments to extend into Application 1 and 2. Application 1 infused the personal and golf profiles with the *self* and *average* conditions, in an attempt to identify certain characteristics that were clear instruments of cheating, with high correlations. The variables we tested included income, gender, age, job sector, skill level, competitiveness, number of golf tournaments played in the last five years, handicap, education level, and others. Seeing any correlation to a particular characteristic could have many practical applications. In business, if a particular type of person is more likely to behave dishonestly, it would be in the best interest of the company or the nation to monitor that person or group of people more closely. Because of the dearth of responses, it was unlikely that many of these variables would reveal robust results. These potentially interesting results will be investigated further with more participants in a later edition of this study to be released by the end of May 2009.

In Application 2, we address relationships found between scenarios. We tested different responses to an opening tee shot. We looked at the difference between taking a mulligan on the first tee and the ninth tee, and the difference between changing your score after completing a hole and after completing the round in order to determine how time functioned in dishonesty. How much easier is it to rationalize a decision at the beginning of the round, before you have invested several hours into your performance, than in the middle or end? Does the trend exist that the further removed a person is from
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an act (a golf hole), the less likely he or she is to attempt to alter it in a dishonest way. Do both of these phenomena extend to business ventures? To test the idea that people will be more willing to rationalize and ignore an act of cheating than to admit the action, we compare responses to whiffing a golf ball—either pretending that you were actually taking a practice swing or admitting that you whiffed the ball but not counting the stroke. We also try to identify how different methods of cheating that accomplish the same end differ in perceived level of cheating and why this difference exists. Does the randomness (kicking a ball is less certain of the outcome than picking the ball up and placing it in a desired location) of a dishonest act affect the cheating level or is it simply dictated by the likelihood of being caught (punished)?

EXPERIMENT 1: PERSPECTIVE AND CONTEXT EFFECT ON CHEATING

The general survey, used for each of the following inquiries, does not change drastically between experiments. In the survey, participants were given one of six different conditions in which they would answer golfing questions. In experiment 1, we investigate the relationship between four of these conditions.

First, we test the prediction that people perceive themselves as more honest than others. The average of individuals’ behavior is the average of the group, by definition. However, given people’s perceptions of themselves and others, this conclusion is not a necessary truth. Just as self-concept maintenance predicts a certain amount of malleability in self-awareness, people want to feel good about themselves and must bend
their perceptions in order to accomplish this task. No one wants to be below average, but 49% of us always will be.

Secondly, we test the prediction that people, given a competitive environment with added incentive to win, will behave differently than those in a friendly, less competitive atmosphere. With more on the line, there is now an added incentive to cheat and also added difficulty in rationalizing a dishonest act as honest. For instance, it is much easier to rationalize taking an extra move in a game of checkers with your friend than it is to rationalize taking an extra paycheck at work. However, the incentives are drastically different—in one case you may win a game of checkers, while in the other you may get an extra two weeks pay. In the case of golf, we hypothesize that cheating will be curbed dramatically in a competitive environment due to both the difficulty of rationalizing such behavior and facing the disgrace of your colleagues if you were caught.

Method

In the twenty-three cheating scenarios addressed in the survey, participants were asked to answer one of two questions:

- How often would you make the same decision described in each scenario on a scale of (0-100% of the time)?
- How often do you believe the average person makes the same decision described in each scenario on a scale of (0-100% of the time)?

Further, they were given one of two contexts in which they were asked to answer the questions:
• You are competing in the Club Championship at your local Country Club. There is a moderately large field and, if you win, you will receive a two-foot tall grand prize trophy and the pride associated with being crowned club champion.

• You are playing in a friendly foursome on a Sunday afternoon at your favorite golf course.

Results and Discussion

The first objective is to test and model the cheating habits of each condition relative to one another. By taking the mean cheating response of the twenty-three scenarios for each condition (self friendly, self competitive, average friendly, and average competitive), it is possible to see the relationship between the conditions. Figure 1 depicts the level of dishonesty relative to the level of competitiveness, given the self and average conditions.
The mean percentage of reported cheating for each condition is as follows:

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<thead>
<tr>
<th></th>
<th>Friendly</th>
<th>Competitive</th>
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<tr>
<td>Self</td>
<td>10.73%</td>
<td>9.94%</td>
</tr>
<tr>
<td>Average</td>
<td>24.03%</td>
<td>21.96%</td>
</tr>
</tbody>
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In other words, on average, participants reported cheating in a friendly setting 10.73% of the time while they believed that the average person cheats 24.03% of the time. As illustrated by Figure 1, in both competitive conditions, participants asked to evaluate their own behavior consistently reported less cheating than those asked to report
their perceptions of the average person’s dishonest behavior. The green *average* line is dramatically above the blue *self* line in both contexts. An overall analysis of variance (ANOVA) revealed this difference to be a highly significant effect ($F(1, 222) = 38.023, p < .001$). This result emphasizes the notion that individuals can alter the facts of any given situation in order to nurture the psyche.

Even as these are measurements of perceptions, and not behavior, if everyone believes they are more honest than the average person, even in reference to dishonest acts, it follows then that any number of egregious dishonest acts may be justified in the psyche (or self-concept) because of perceptions of self-virtuosity. A golfer may be willing to rationalize any number of dishonest behaviors—kicking a partner’s ball in the woods or shaving strokes of his or her total score—because of the belief that, given the opportunity, your partner would do the same, and worse, to come out on top. Similarly, this result could alter an element of the self-concept maintenance theory previously described. The theory proposes that people are willing to cheat only up to the point that they are able to rationalize a particular act—maintaining the self-image of being a ‘good’ person. The result of this experiment may imply that this notion of being a good person is defined by perceptions of the average person’s behavior. Nearly *everyone* views him or herself as better than average. If your average murderer views himself as a ‘good’ person, then he may be able to rationalize acts, even the act of murder, by believing that the average person, given his set of circumstances, would behave even worse. Thus, the spectrum of acceptable cheating for an individual varies by his or her perception of the average person, which may explain why such bad people are not hindered by their conscience when they commit dishonest acts.
The second portion of the experiment aimed at identifying the effect of competition on perceptions of cheating behavior. In both the self and average conditions, perceived cheating decreased as we introduced the element of competition. However, the differences were small, 0.79% and 2.99% respectively. This difference was not found to be statistically significant (F(1, 222) = .484, p=.487). As illustrated by Figure 1, the two lines are relatively flat between conditions. This result does not necessarily imply that level of competitiveness does not affect the impulses responsible for behavior. However, it does indicate that the change in these forces balances out and ultimately does not change perceived behavior.

Business implications of this conclusion are immense. If it is indeed the case that people believe they cheat in the same quantities in friendly and competitive environments, then they also believe that the amount of dishonest behavior in checkers in no way differs from dishonest behavior in a boardroom. Golfers are unequivocally stating that the man who cheats at golf is the same man who cheats in business, although these are only perceptions of individuals, not actual behavior. However, this conclusion expands on the 1993 study in which businesspeople said they thought behavior in golf correlated to behavior in business. In this case, it appears people think dishonesty in friendly environments is no different from dishonesty in competitive situations.

In golf, this conclusion seemed particularly surprising. From this observation, it would appear that people believe they are just as likely to cheat on a Sunday afternoon round with friends as they are if they were playing in the Masters at Augusta National Golf Club. In practice, this most certainly cannot be the case simply because of the way professional golf tournaments are structured. With fewer opportunities to cheat and more
risks involved in doing so, these competitions would exhibit less dishonest behavior. However, people’s perceptions do not match that hypothesis about behavior.

We suggest an alternative, statistically descriptive, explanation. The competitive condition for the survey states that you are playing in the ‘Club Championship at your local Country Club.’ However, the manner in which you interpret the seriousness and importance of the ‘Club championship’ or any other tournament depends on a variety of factors—namely one’s previous experience in tournaments and perception of their import. For instance, a person who plays golf, does not belong to a country club, and has never played in a golf tournament, may perceive his behavior very differently than the golfer who belongs to a prestigious club and regularly plays in tournaments. When making decisions on cheating during a golf tournament, one could immediately think back to the last tournament in which he or she played and model answers based on that experience. Hence, a PGA golfer would relate the Club Championship closer to his most recent tournament experience while the amateur golfer might reflect on when he wagered $10 with his friend. From these two different perspectives, we hypothesize that the person with greater experience in serious tournaments might perceive a larger discrepancy in behavior between the *friendly* and *competitive* conditions.

Within the 222 participants who completed these four conditions, there were 17 NCAA men’s college golfers. Other than professionals, these individuals should represent the perspective of the most skilled and most serious golfers. Their 2X2 matrix of all four conditions is shown below in Figure 2:
Driven to Cheat 29

As you can see, there is a much more pronounced downward slope, which results from the added pressures of competition. As expected, this result suggests that the most skilled and experienced golfers see a larger gap between friendly and competitive competition, which is then reflected in their perceived behavior.

Unfortunately, there was not a larger response from this group when they were solicited to participate. Hence, the result is not statistically significant (F(1,17) = 1.792 p=.204). This is an example of a question that warrants future inquiry to confirm statistically whether or not this phenomenon is robust.
EXPERIMENT 2: PERCEPTIONS OF MORALITY AND SELF-DELUSION

The last two of the six conditions of the survey shift from the issue of cheating to the question of morality. We are not immediately interested in the different scenarios relative perceived level of morality. Instead, in experiment 2, we investigate how people’s perceptions of morality are related to their perceptions of behavior.

First, we test the hypothesis that participants’ perception of morality is positively correlated to behavior. In other words, people who believe an act is more honest are more likely to make that decision. Even if people understand that they are cheating, they are more likely to continue cheating if they perceive that act to not be terribly immoral. This relationship would demonstrate that societal rules often may be less important than the way those rules are perceived.

Second, we investigate participants’ response to situations they perceive as more and less moral. How does this affect perceived behavior in the self versus average condition? Assuming the correlation hypothesized in the previous paragraph, we now test the hypothesis that people will respond dramatically to the morality variable in the average condition and only slightly in the self condition. This trend should reveal that people, given a group of decisions that would all be categorized as ‘dishonest,’ are less likely to admit that they would respond differently to each situation because they view dishonesty on a scale (more or less dishonest) instead of the definitive ‘dishonest’ and ‘honest’ responses. However, they also believe that the rest of society is more likely susceptible to this scale of dishonesty, and will vary their levels of cheating more drastically.
Method

In the survey, the same friendly and competitive conditions are taken into consideration. The test addresses the same twenty-three golfing scenarios. However, now there exists a third condition of perspective in addition to self and average. The third condition addresses people’s feelings about each of the scenarios. At the beginning of the survey, instead of asking either the self or average question, it proposes the following:

- How moral or immoral is the decision described in each scenario on a scale of (1-10)?

An answer of (1) represents a decision in golf that is completely immoral while a (10) represents a decision that is completely moral. Because all twenty-three scenarios are examples of cheating in golf, the answer to all of the questions, if you are following the rules of golf to the letter, should be a (1). However, because this rarely happens in life, let alone golf, that phenomenon is unlikely to manifest.

185 participants responded to this condition. Responses varied greatly. Some participants assigned a (1) to each and every scenario while others responded with (10) to five of the questions. In order to understand the relationship we are seeking, we needed to combine the friendly and competitive conditions, as they are not immediately relevant to the relationship between morality and behavior. We calculated the mean response from each of the scenarios and ranked them from least to most moral. Participants viewed asking for advice on club selection as the most moral scenario (5.16), while they viewed shaving strokes off your scorecard after completing your round as the most immoral scenario (1.14).
We then found the average cheating reported in each scenario from the *self* and *average* conditions. The lowest perceived cheating in both conditions was the post-round scoring adjustments (0.46% self, 4.52% average), while the highest reported cheating differed in the two perspectives. Comparing scenario morality to actual perceived behavior presented a way to directly analyze the first phenomenon in question for Experiment 2.

Further, we took the difference between the reported levels of cheating in the *self* and *average* conditions and related it to each scenario’s average morality in order to tackle the second Experiment 2 objective.

**Results and Discussion**

We found that both the *self* and *average* behaviors positively correlated very strongly with the *morality* condition. We found that both relationships are significant at the 0.01 level. The mean level of perceived morality for a given golf situation had a correlation of 0.884 to the *self* condition and .871 to the *average* condition. Rephrased, as the people perceive a situation to be increasingly moral, their levels of cheating will increase in tandem. Figure 3 illustrates this phenomenon by plotting the mean morality and cheating levels of each scenario in the XY plane, where (1) on the x-axis represents a completely immoral situation increasing to (10), a completely moral situation:
As evidenced by the graph, perceived cheating increases with perceived morality. As demonstrated by the $R^2$ figure, the linear regression line accounts for over 75% of the behavior in both the *self* and *average* conditions.

This observation seems at first logical and expected. The most interesting part of this result is what it reveals about perceived dishonest behavior. To reiterate a point addressed earlier, all of the scenarios in the survey describe examples of cheating in golf. If the survey had addressed a field other than golf that did not include a rulebook—such as decisions in business—relying on one’s perceptions of situations to dictate behavior would have been logical. This is because, in business and other fields, there is no definitive line between cheating and not cheating—the binary variable of 0 for being honest and 1 for not being honest. There is instead a large gray area. However, in the case of golf, there is a rulebook, and each and every scenario from the survey breaks a rule in that rulebook.
As a result, because the gray area no longer exists, participants should be able to definitively categorize the decisions as ‘cheating’ or ‘dishonest.’ Thus, although participants had a point of reference to determine or shape their choices, many still followed their own desires and impulses, increasing perceived cheating as they felt a situation dictated. Even given a predefined code of ethics, society disregards the code in favor of its own interpretation. This confirms the hypothesis that, even if a person knows he or she is cheating, they will still behave in accordance with their own perceived moral code.

Next, we try to determine whether or not self-reported cheating increases in line with average-reported cheating, dependent on the perceived morality of a situation. We found that the difference between the two perceived levels of cheating (self and average) positively correlated (0.580) to the perceived level of morality. As a situation seemed more moral in the views of participants, the gap between what people reported as their own cheating versus the average person’s choices widened. In fact, we found that people’s perceptions of the average person deteriorated quickly relative to people’s perceptions of themselves.

Figure 4 illustrates the cheating gap for each scenario, relative to its perceived moral status:
In twenty-two of the twenty-three scenarios, the deltas appear to follow a linear trend, as demonstrated by the regression line. It appears that people are much more willing to condemn the convictions of the average person than they are to question their own.

The only scenario which does not follow the trend is Scenario 16, as shown by the red dot in Figure 4. The scenario is as follows:

- You have taken two practice swings and on the third, you accidentally hit your ball slightly and it jumps three feet to the right. Because you obviously did not mean to hit it, you decide not to count it as a stroke and simply move it back to where it rested before the practice swing fiasco.
In this scenario, the gap between perceived *self*-behavior and *average*-behavior is smaller than would be expected given its relatively high level of perceived morality (3.65). With respect to the regression line in Figure 3, participants perceived both higher than expected levels of self-cheating and lower than expected levels of cheating for the average person. This phenomenon accounted for the significantly smaller than expected cheating gap.

What are the unique characteristics of this particular scenario that might explain its unexpected outcome? Scenario 16 has the element of unfairness to it: not intending to strike the ball, but doing it anyway. However, several other scenarios that follow the expected cheating gap trend share this characteristic. Furthermore, a golfer moves the ball back to its original position in the scenario. In other examples, such as the two tee shot mulligan scenarios, where one re-strikes the ball from its original position, results also follow the cheating gap trend. Perhaps it is a combination of these characteristics or another unknown characteristic that causes participants to report higher levels of personal dishonesty and garner a more optimistic view of humanity.

**APPLICATION 1: THE CHARACTERISTICS OF A CHEATER**

This portion of the study aimed at identifying characteristics of individuals who are more likely to exhibit dishonest behavior—or at least perceived dishonest behavior. We hypothesize that not only do such characteristics exist, but that, although perceptions about behavior do not necessarily mirror actual behavior, it would be logical that people who perceive both higher levels of *self* and *average* cheating would also behave as such. One could say that individuals who report higher *self*-cheating were simply more honest and those who reported higher cheating levels of the *average* person simply more cynical.
However, if a particular type of person reports high levels of both self and average cheating, there are two possible conclusions. One, that this type of person is both very honest and very cynical. The other, more likely, conclusion is that X type of person both perceives high levels of cheating and also behaves in such a manner. This conclusion cannot be substantiated statistically through this study because all of the questions model perceptions. Observing behavior in golf is particularly problematic for many of the same reasons golf is great for modeling perceptions of dishonesty. There are many opportunities to cheat, and no one knows when you do it.

After analyzing the data, we found particular difficulty coming up with statistically significant conclusions, primarily because of the number of participants in the study. We had anticipated a drastically larger participant pool from which we could garner conclusions. Unfortunately, the company which offered to release 300,000 email addresses to us for the study, at the last minute, decided to seek legal counsel before proceeding. One month later, they have yet to release the addresses, thus hindering our efforts. Many of the characteristics that we hoped to investigate, such as job sector or income, required a large sample population because of the variety of options from which to choose. Once these addresses are released to us, further study will hopefully reveal meaningful conclusions.

The two characteristics that demonstrated a statistically significant result for cheating were perceived skill level and competitiveness. Participants were asked to answer on a scale from (1-10) “How good are you at golf?” and “How competitive are you?” Using this data, we compared the results with the average reported cheating levels for the self and average conditions. We found the strongest relationship to exist in the self
condition. Perceived skill level and competitiveness dramatically and negatively affected the amount of cheating. As the respective perceived levels increased, self-reported cheating decreased. Cheating in the self condition correlated -0.396 to competitiveness and -0.464 to skill level. Both results had a p-value below 0.001. Although not modeling actual behavior, this result implies that, as you get both more competitive and more skilled, you feel more of an allegiance to the strictures and rules of the game, and in turn are less tempted to break those rules.

Upon further examination, we created an amalgamation of the self and average conditions, weighting the mean of each condition 50%. We then graphed the results dependent on the skill and competitive variables. Figures 5 and 6 show the results:

![FIGURE 5](image_url)

**Cheating and Skill Level**

- % of Time Cheating
- R² = 0.7347
- Poly. (Mean Self/Average)
Interestingly, both show remarkably similar curves, resembling normal distribution bell curves. The cheating average peaks around (3) for both graphs, indicating a phenomenon more complicated than the simple linear regression discussed earlier. As demonstrated by the $R^2$ figures, a third-degree polynomial regression can explain 73% and 92% of the data’s variance.

Possible explanations for the phenomenon are numerous. One explanation is that people who are marginally uncompetitive or moderately unskilled at golf do not appreciate the importance of the rules of a game or contest and simply cheat when they feel like it. However, perhaps what separates the moderately unskilled and uncompetitive individuals from the completely uncompetitive beginners is that the (1)s and (2)s do not have the full faculties to know how to cheat. Beginners do not know the rules well
enough to necessarily take full advantage of them (in terms of dishonesty). Similarly, the uncompetitive person does not even see cheating as a possibility because he sees the structure of the activity as a nuisance. He will cheat when he feels like it, but not go out of his way to do so.

APPLICATION 2: COMPARING SCENARIOS

Appendix 1 includes a list of each scenario addressed in the survey and its mean cheating level for each condition. The following analysis selected several interesting results from individual scenarios or groups of scenarios that revealed a particular perceived behavior. The actual method of analyzing the data from the survey remains the same, evaluating the mean levels of perceived cheating for the self and average conditions for each scenario. The experiment concentrated on the relationships between scenarios.

In Scenarios 5, 7, 8, 9, 10 and 11, we investigated how different methods and degrees of altering your lie affect perceived cheating levels. To this end, we hoped to confirm the hypothesis that individuals are more likely to alter situations if they are not certain of the exact outcome. Because one cannot guarantee a particular outcome, the perceived hit to the self-image is mitigated, thereby leading a person to commit this dishonest act more frequently. Also, the more flagrant the act of dishonesty, the less likely a person should perceive they will commit that act, at least in theory.

In Scenarios 1, 2, 3, and 4, we explored the variety of dishonest responses to hitting a bad shot (three of which were in response to a bad tee shot). We expected that the more flagrantly dishonest the scenario, the less likely a person will admit to
committing the act. Also, we tested whether cheating habits are dictated by the time period during the round that the scenario takes place (e.g. the first tee versus the ninth tee). From this result, perhaps we can conclude that businesspeople are less likely to break rules the more time they have invested in a project.

Finally, we investigated the psychology of the whiff in Scenarios 15 and 16. Upon breaking the rules, we explore whether individuals are more likely to acknowledge it or to brainwash themselves into thinking that they never cheated at all.

**Results and Discussion**

Figure 7 illustrates the mean percentages of cheating for each of the lie-altering scenarios.

![Figure 7: Changing your Lie](image)

The first four scenarios in Figure 7 are responses to being in a difficult situation. In the first scenario, the golfer is in the deep rough and has to decide whether or not he improves his lie with his club. The next three scenarios on the graph are different
responses to being behind a tree. Picking up and placing the ball in a better position represents the most certain outcome from cheating, while kicking the ball to improve position is the least certain outcome. If one kicks the golf ball, it is possible that they may kick it too hard or poorly and end up with a worse lie than that in which they started. However, in placing the ball, one can guarantee a good opportunity. Moving the ball with the golf club falls in between the two other scenarios. All three scenarios were perceived morally comparable—all three’s mean morality fell between (1.16-1.22). We expected there to be a direct correlation between the certainty of an outcome and the frequency with which the golfer perceives he cheats; and, because they all are perceived as equally immoral, any perceived difference in cheating behavior should be the result of cheating preferences.

Instead, we see a different result entirely. In the average condition, using your club to move the ball is perceived as the most frequent behavior, even though a golfer has more control over the situation, and placing the ball is the least common behavior. In the self condition, all three behaviors were similarly small. The startling result is two entirely different trends for the two conditions.

The most likely explanation for the average condition is the prospect of getting caught cheating. It is much easier to see a player bend down and pick up his ball than it is to see him move the ball with his club. This implies that people believe that the average person will do whatever is most likely to prevent him or her from getting caught, not which behavior is more or less moral. This conclusion is supported by the results of the two scenarios on the right of Figure 9. Dropping the ball in the hole is much more
difficult than simply declaring ‘it was a gimme’ or picking up the ball before your opponents see that you did not finish.

In the *self* condition, the lack of change between the behaviors demonstrates a possible direct correlation between self-perceptions of cheating and morality, more so than in the *average* condition. People perceive that they always behave in conjunction with a situation’s morality. This is another example of individuals deluding themselves into thinking that they do not capitalize on opportunities, even if they are opportunities to be dishonest. This conclusion is supported by the fourth scenario from the left in Figure 8. Kicking the ball a greater distance to a perfect lie instead of just to a reasonable lie is less moral. Hence, we would expect, as we observe, a steady decline in the perceived *self* cheating.

Next, we take four scenarios in which a golfer has to respond to losing his ball. The resulting means are shown in Figure 8.
One of the original golfing objectives of this study was to determine the degree to which the opening tee shot could be rationalized—the ‘If I take a mulligan, it is as if I just started the round over.’ In order to determine this phenomenon, we compared how taking a mulligan on the ninth hole tee shot differed from taking a mulligan on the first tee shot. As expected, we found an enormous discrepancy (self: 26.86% versus 3.92%, average: 49.91% versus 14.4%). These represent scenarios in the top and bottom ends of perceived cheating among the twenty-three scenarios. Two identical scenarios, placed in different contexts, can exhibit drastically different levels of perceived dishonesty. This result mirrors the finding that participants felt that altering a scorecard after a round as significantly more dishonest than altering the scorecard after finishing a hole (self: 0.46% versus 10.14%, average: 4.52% versus 17.86%). Even though the two acts could be the same in terms of shaving strokes, because the timing of the dishonesty differed, the perception of the behavior also changed. Perhaps this result also leads to the conclusion that the further removed a person is from an act, the less likely he or she is to attempt to alter it in a dishonest way. In business, this could imply that people are more likely to change a figure or two on a budget or income statement while they are creating it than after the fact. Additionally, in the case of the tee shot, a person is less likely to be dishonest the more they have invested in the situation (e.g. two hours into a round of golf versus just starting).

Similar to Figure 7, we observe that the average condition appears to correlate to the likelihood of being caught or punished. In terms of morality, participants regarded pretending that you found your ball by dropping another one as the least moral response
(1.14), while treating out of bounds as a lateral hazard was the most moral response (2.08). We do not include the first hole mulligan because of the special circumstances presented by the first tee shot in golf, described earlier. Even though taking a mulligan on the ninth tee shot is viewed as more moral than pretending to find your ball (in fact, you would receive a larger competitive advantage), the average perceived dishonesty is almost identical (14.1% to 14.4%). This could account for the previous phenomenon proposed—that people believe the average person will act in his own best interest in all cases, even if it is more dishonest, provided he doesn’t get caught. Getting caught dictates the average perception, and getting caught (punished) for taking a mulligan seems equally as likely as getting caught (punished) for pretending to find your ball.

Finally, in Scenarios 14 and 15, we investigated how people are more likely to respond to a whiff. Outlining identical situations in the two scenarios—take practice swings, address the ball, then whiff the ball—we asked how often golfers ‘decide that [the whiff] was really a practice swing and continue as if nothing happened’ compared to ‘know[ing] it was a real swing, but don’t count it.’ This seemingly small difference should serve as a way to quantify people’s direct perceived willingness to fool the ego and the self. One response represents a conscious decision to be dishonest while the other buries the decision within the subconscious, never to resurface and confront one’s self-image. According to self-concept maintenance, individuals seek out ways to protect the self-concept or self-image. From this theory, we expect to see a larger frequency of individuals pretend that the whiff never happened.

Indeed, this is the result for the self condition (16% versus 11%, respectively). This is not a particularly large difference, but it appears that individuals distinguish their
perceptions of the two events. In the case of the *average* condition, there is little to no difference between the two scenarios (27% versus 25%). This could be accounted for by the fact that, in terms of being caught, as described earlier, there is no change. You are equally as likely to suffer the consequences of cheating whether or not you punish yourself internally as well.

**GENERAL DISCUSSION**

Across two experiments, we found that it is possible to model certain drivers of dishonesty and to alter perceptions of behavior given certain characteristics such as changing someone’s feeling about the likelihood of getting caught. We determined that people view cheating in degrees of dishonesty, although people were unlikely to admit as much. This is a logical result: people see murder as worse than stealing. However, people don’t want to admit they are more likely to do one over the other. Instead, it is more favorable to claim that you would be equally unlikely to ever do either.

In every situation measured, people viewed themselves as more honest than the average person. This is not surprising as it follows the *better-than-average* effect described by Mark D. Alicke in *The Self in Social Judgment*, with explanations ranging from selective behavior choice (you only recall traits that show you are better than average) to the view that there is a compromise between self-knowledge and the ideal trait conception (which follows more closely the theory of self-concept maintenance)\(^{23}\) accounts for the phenomenon.

Some of the results coming from scenario comparisons proved particularly interesting. The fact that the *self* distinguished no difference between method of cheating

because the outcome remained the same, while average not only differentiated the methods, but also appeared to be directly correlated to the likelihood of being caught and punished seemed surprising. This phenomenon demonstrated how an individual can be blinded when considering his own actions, but will observe all incentives present in an economic dilemma—including the immoral incentives—once the subject strays from the self.

Another one of the interesting results came from the nearly identical trends found in the reported cheating levels dependent on skill level and competitiveness. Although two entirely different forces, it appears that the more one has invested in an action, whether it be the practice required to become highly skilled or the focus to be particularly competitive, the more likely a person is to follow the structure defined by the rules of an activity. Amazingly, even though competitiveness proved an instrument of cheating, changing from a friendly context to a competitive atmosphere did not affect the perceptions of mean behavior.

It is necessary now to look at the limitations of our results. First and foremost, in all experiments that measure people’s opinions, and not their behavior, it is difficult to make any definitive conclusions about actual practical behavior. Although it might seem logical that because an investment banker or doctor reported higher cheating percentages in all conditions than the artist, then the banker or doctor is more likely to cheat in real life, one can never definitively prove this assertion without behavioral data.

Further, one of the greatest strengths of the study is also a weakness. Because we used golf as a medium to measure general ethics, extrapolating the results to business, although logical and supportable, is also not a provable assertion. However, utilizing the
uniformity of golf still served as a common denominator for businesspeople whose industries encompass a wide variety of ethical dilemmas and ambiguity.

In terms of sources of error from the actual survey, two particular issues are relevant. The number of golfers surveyed was not low enough that results were not statistically significant; however, more participants would allow clearer manipulation of the data and stronger, more definitive trends. Also, on the layout of the survey, the self and average conditions were only addressed at the beginning of the survey. Over the course of taking the survey, participants may have forgotten that they were supposed to answer one condition or the other, and instead answered with whichever condition they wanted. This limitation is particularly relevant in the friendly versus competitive conditions where people could forget that they were supposed to be answering the scenarios in a particular context. Often, it was possible that participants simply answered what they would do in a normal situation, which could explain the lack of a difference between the two conditions in the results.

Naturally the next question, from a practical perspective, relates to how these results could be used to curb cheating in modern society. People’s perceptions can not be used necessarily to model and predict behavior. However, using this information to identify those who believe they cheat the most, on average, could provide the foundation of some sort of profiling program that would function as a safeguard against acts such as shoplifting or stealing corporate information (similar to much of the profiling that already takes place in casino surveillance). In order to create such a system, much additional research would have to be conducted to create a more complete picture of dishonesty drivers. This study serves as a good first step, or glimpse, into what draws a person to
cheat and what type of people might be repeat offenders. However, the means by which to incorporate these safeguards into everyday life still remains a daunting task—a task that future research will hopefully undertake.

Dishonest behavior will likely always be a large part of everyday society. Because people seem to be eager and willing to rationalize or ignore their dishonest behavior, it will be difficult to attack a problem when no one admits they have a problem. Pearl Bailey puts it best: “The first and worst of all frauds is to cheat one’s self. All sin is easy after that.”

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### Scenario #1.
You are on the first tee, ready to start a great round of golf. No one else is watching you take your first swing. Unfortunately, you haven’t had a chance to warm up properly. Consequently, you shank your first shot out of bounds, and the ball is irretrievable. Knowing that it is the first shot of the round, you implement the “First Shot Mulligan” rule, whereby it is just like starting the round over again. You take your mulligan, knock it into the fairway, and continue the round as if the first shot never happened.

### Scenario #2.
You are on the ninth tee box. No one else is watching you take your swing. You shank your first shot out of bounds, and the ball is irretrievable. Knowing that it is the first shot of the hole you decide to just start the hole over again. You take your mulligan, knock it into the fairway, and continue the round as if the first shot never happened.

### Scenario #3.
You hit your ball out of bounds on your tee shot on hole #7. Instead of hitting a provisional and taking the stroke and distance penalty, you play it as if it were a lateral hazard and drop a new ball where you feel it crossed the out of bounds line.

### Scenario #4.
You go to look for your ball after hitting your approach shot over the green and into the deep rough. However, after about a minute of looking, you are pretty sure you aren’t going to find it. Instead of playing it as a lost ball, you pick a ball out of your pocket, drop it on the ground, and announce to your group that you found the ball.

### Scenario #5.
You have knocked it over the green on #16. This is one of the worst places to be on the course. The rough is almost six inches high in some places, and it will be nearly impossible to get the ball close to the pin. You find the ball buried in some Kentucky Blue Grass and decide that the only way you will be able to stay competitive with the rest of your group on the hole is if you have a better lie. So, you decide to use your wedge to casually move your ball so it lies higher in the grass, giving you a chance to knock it within a few feet and save par.

### Scenario #6.
You have grounded your club on the #15 green, and are about to take your putt when the ball suddenly rolls forward ½ an inch. By all accounts, it is a very windy day and there is little chance that you actually caused the ball to move. However, by rule, if the ball moves once you address it, you are deemed to have caused the ball to move and must count a one stroke penalty. You are the only one to see the ball move, feel it would be unfair to be forced to count an extra stroke, and decide to simply continue without taking the penalty or notifying your partners.

### Scenario #7.
You are on the green of #8. You putt to within 5 feet and decide that you are close enough to the hole and probably won’t miss the next putt, so you pick up your ball and drop it in the hole.

### Scenario #8.
You are on the 9th green and have a four foot putt left for a bogey. Instead of knocking it in, you decide it’s a ‘gimme’ and pick up the ball and walk to the golf cart, marking down a bogey.
Scenario #9. You are in the left woods on #12. You get to your ball and see that there is a tree right in the middle of your line towards the green. However, you also see that if you move the ball about five feet to the right, although still in the rough, you would have a reasonable chance at hitting the green. So, you decide to kick the golf ball about that distance to the right and take a shot at the green.

Scenario #10. You are in the left woods on #12. You get to your ball and see that there is a tree right in the middle of your line towards the green. However, you also see that if you move the ball about five feet to the right, although still in the rough, you would have a reasonable chance at hitting the green. So, you decide to pick up the golf ball and place it far enough right that you can take advantage of that opening and take a shot at the green.

Scenario #11. You are in the left woods on #12. You get to your ball and see that there is a tree right in the middle of your line towards the green. However, you also see that if you move the ball about five feet to the right, although still in the rough, you would have a reasonable chance at hitting the green. Instead, you just decide to casually kick the golf ball until it reaches the fairway so you will have an unobstructed shot at the green.

Scenario #12. After your round, you don’t think you played terribly. You hit several great shots and, overall, it wasn’t a bad round of golf. However, after tallying your score, you realize you had a terrible day scoring. You decide that you deserve a lower final total and change one or two scores from earlier in the round. Your final score is now more along the lines of what you feel you deserved.

Scenario #13. You had a really bad hole on #13. You normally are a very good golfer, regularly breaking 90. You scored a 10 on the hole, but you decide, given your skill level, it wouldn’t be reasonable to take that high of a score on a hole. You also know that no one else knows your score on the hole. You decide to subtract a couple of shots from the score and take an 8.

Scenario #14. You have taken your practice swings and are ready to hit the ball. Unfortunately, on your swing, you whiff the ball. You decide that it was really a practice swing and continue as if nothing happened.

Scenario #15. You have taken your practice swings and are ready to hit the ball. Unfortunately, on your swing, you whiff the ball. You know it was a real swing but don’t count it when your partner asks you your score at the end of the hole.

Scenario #16. You have taken two practice swings and on the third, you accidentally hit your ball slightly and it jumps three feet to the right. Because you obviously did not mean to hit it, you decide not to count it as a stroke and simply move it back to where it was before the practice swing fiasco.

Scenario #17. You hit a great tee shot on #4, right in the middle of the fairway, and once you get to your ball, you find that it has come to rest right in the middle of a divot. You think it is unfair that you hit such a great shot and were not rewarded with a reasonable lie. You then move the ball out of the divot and play it from the fairway a foot from where it came to rest.
Scenario #18. You hit a poor tee shot on #4, right of the fairway, and once you get to your ball, you find that it has come to rest deep in the rough. You think it is reasonably fair that you ended up with this lie. You then move the ball out of the deep rough and play it a few inches to the left where there is lighter rough.

Scenario #19. You are waiting your turn to tee off and aren’t sure what club to use. When the player before you has teed off, you ask what club they used.

Scenario #20. Your handicap is 15. You are playing with a new group of players at a new club and have the opportunity to say that your handicap is higher to give you an advantage over the other players. You tell this new group that you are a 20.

Scenario #21. You are playing on a new course today and your current handicap is 15. This course is harder than you could have imagined and you are having a terrible day. Instead of your usual 83-90 score, you put up a 100! Needless to say, you don’t want this to mess up your handicap that you have worked so hard to bring down, so you elect to not turn in the score.

Scenario #22. After your wayward tee shot to the right, your ball is just inside the lateral hazard stakes that run right along the creek—although the ball is not in the water. No one in your group sees that your ball is across the hazard line. You decide to ground your club in order to give yourself a better chance at making solid contact with the ball. You do not count the associated penalty strokes.

Scenario #23. Your wayward approach shot lands in the greenside bunker. You decide to ground your club in the sand to give yourself a better chance of getting the ball out on your first attempt. You do not count the associated penalty strokes.
<table>
<thead>
<tr>
<th>Scenario</th>
<th>Mean Morality</th>
<th>Mean Cheating Self</th>
<th>Mean Cheating Average</th>
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<tbody>
<tr>
<td>First Hole Mulligan</td>
<td>3.7</td>
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<td>Ninth Hole Mulligan</td>
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<td>Tee Shot OB treated as lateral hazard</td>
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<td>Drop Ball in Hole</td>
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<td>Whiff know it was Real Swing</td>
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